

**ABSTRACT OF THE DISCLOSURE**

Fibers of improved quality can be produced with a reduced energy input in a device for producing synthetic fiber materials which has a polymer melt feed leading to a rotating hollow reactor (1), the wall of which can be heated and which widens conically in order to guide a film melt toward an open side that can be closed with a lid (13), and which has ribs (4) for dividing the melt film into fibers that grow rigid after leaving the hollow reactor (1); and said improved quality can be achieved specifically in that the hollow reactor (1) is vertically oriented and exhibits a continuously curved inner wall and at the curved upper side exhibits an opening (3) for introducing the polymer melt, and in that a rotating distributor plate (12) is positioned opposite the opening (3), at a slight distance from the inner wall of the hollow reactor (1).